Organic Fertilizer: What Does it Mean?

Go Organic!

"Natural organic" or "slow release" fertilizers provide nutrients in small amounts over an extended period of time—just the way your plants need them.

N = nitrogen

P = phosphorous

K = potassium

Nitrogen, Phosphorous and Potassium are three major nutrients important for the growth of healthy plants. Any kind of plant food (fertilizer) needs to have a healthy balance of nutrients.

In Western Washington, the optimum ratio of N-P-K is three parts Nitrogen to one part Phosphorous to two parts Potassium for turf. Trees and shrubs do not need added P or K in our soils, only nitrogen.

3N-1P-2K

Slow-Release is Best

Quick-release fertilizers generally are high in nitrogen and highly soluble in water—rain can wash them right down the storm drain, directly into our waterways and ground water. Too much phosphorus causes algae to grow and use up oxygen, suffocating aquatic wildlife.

Look for % solubility in water

Groundwater contamination with nitrates is a major concern, and the more water soluble a fertilizer, the more damage it can do to drinking water. Since organic fertilizers generally contain lower concentrations and release nutrients at a slower rate compared to synthetic fertilizers, organic fertilizers offer a healthier alternative to chemical fertilizers.

Lawns need only small amounts of nutrients. Applying more fertilizer than what the label says will NOT make your grass greener and healthier. Stick to the amount called for on the label, if not less!

WHAT N, P, AND K DO

Nitrogen (N) promotes growth in plant leaves and stems.

Phosphorus (P) is vital for seed germination, strong root systems, disease resistance, and flower and fruit formation.

Potassium (K) helps plants form sugars, starches, carbohydrates, and proteins. It also helps fortify plants' immune systems, strengthen stems, protect against the cold, preserve water, and encourages fruit ripening.

MORE INFO ON BACK

King County
Department of
Natural Resources and Parks
Solid Waste Division

Five Steps to: Natural Yard Care

Organic Fertilizer: What Does it Mean?

King County
Department of
Natural Resources and Parks
Solid Waste Division
206-296-4466
711 (TTY)

3-1-2?
9-3-6?
27-9-18?
What's with these numbers?!

Fertilizer packages often list NPK ratios, and the numbers can be quite different. These nutrient values (3-1-2, 9-3-6, etc), however, simply represent a total percentage of packaged weight. Also, it is important to note the strength of the nutrients when diluted to their recommended levels, in particular with liquid fertilizers.

Organic fertilizers often have lower NPK values than chemical fertilizers, but moderation is the key: too much of any fertilizer can hurt your plants!

When to Apply

The best time to feed your lawn is in the fall to build up nutrient reserves in the grass. If you decide to fertilize twice a year, feed once in late May and then again in the fall. However, lawns generally are able to use reserves built up over the winter in June, so there is often no need to fertilize in May.

PS. Don't use weed and feed type products. They contain a broad spectrum pesticide (2, 4-D) that is not needed throughout a lawn, and that is harmful to salmon and other living things. For more information and some alternative natural pest control suggestions, visit http://www.metrokc.gov/dnrp/swd/naturalyardcare or call the Natural Lawn & Garden Hotline on 206-633-0224.

What's the difference between compost and fertilizer?

Compost is a soil amendment made of organic matter. Its use returns valuable nutrients and minerals to the soil, strengthening the soil structure, making it more porous for beneficial insects such as earthworms, and helping the soil store water. In addition to being an important source of nutrients, compost is also valuable for its ability to store those key nutrients.

Like compost, organic fertilizers are typically made from the remains or by-products of organisms. Synthetic fertilizers typically contain petroleum products. Organic fertilizers have labeled N, P, and K rates, guaranteed by analysis, whereas compost does not. Like compost but unlike synthetic fertilizers, organic fertilizers improve soil structure and increase beneficial fungal and bacterial activity in the soil. Finally, organic fertilizers remain more stable in soil, are slower release, and are thus less likely to add to water pollution than synthetic fertilizers.

For more information and
some alternative natural pest control suggestions, visit
http://dnr.metrokc.gov/swd/resrecy/composting/pesticides.asp
or call the Natural Lawn & Garden Hotline on **206-633-0224**.

This material will be provided in alternate formats upon request.

Printed on recycled paper
Sep 04